

Translation

PATENT COOPERATION TREATY

PCT/JP2003/007010



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

|  |  |   |
|--|--|---|
| Applicant's or agent's file reference<br>E1-A0304P   | FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) |   |
| International application No.<br>PCT/JP2003/007010   | International filing date (day/month/year)<br>03 June 2003 (03.06.2003)  | Priority date (day/month/year)<br>06 June 2002 (06.06.2002) |
| International Patent Classification (IPC) or national classification and IPC<br>C07D 471/04, 473/06, 473/18, 473/22, 473/30, 473/40, 487/04, 498/14, A61K 31/5025, 31/522, 31/5365, 31/519, A61P 1/00, 3/04, 3/06, 3/10, 15/00, 19/10, 29/00, 35/00, 37/02, 37/08, 43/00 |  |   |
| Applicant<br>EISAI CO., LTD.   |  |   |

|   |
|---|
| <p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of <u>          </u> sheets.</p>   |
| <p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the report</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input checked="" type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input checked="" type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p> |

|   |   |
|---|---|
| Date of submission of the demand<br>18 December 2003 (18.12.2003) | Date of completion of this report<br>30 April 2004 (30.04.2004) |
| Name and mailing address of the IPEA/JP                           | Authorized officer  |
| Facsimile No.   | Telephone No.   |

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP2003/007010

## I. Basis of the report

## 1. With regard to the elements of the international application:\*

- ☒ the international application as originally filed
- ☐ the description:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the claims:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, as amended (together with any statement under Article 19  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the drawings:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/fig \_\_\_\_\_

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

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## III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application.

☒ claims Nos. 31

because:

☒ the said international application, or the said claims Nos. 31  
relate to the following subject matter which does not require an international preliminary examination (*specify*):

The subject matter of the above claim relates to a method for treatment of the human body.

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. \_\_\_\_\_  
are so unclear that no meaningful opinion could be formed (*specify*):

☐ the claims, or said claims Nos. \_\_\_\_\_ are so inadequately supported  
by the description that no meaningful opinion could be formed.

☒ no international search report has been established for said claims Nos. 31

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the standard.

☐ the computer readable form has not been furnished or does not comply with the standard.

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**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

|                               |        |             |     |
|-------------------------------|--------|-------------|-----|
| Novelty (N)                   | Claims | 1-30, 32-33 | YES |
|                               | Claims |             | NO  |
| Inventive step (IS)           | Claims | 1-30, 32-33 | YES |
|                               | Claims |             | NO  |
| Industrial applicability (IA) | Claims | 1-30, 32-33 | YES |
|                               | Claims |             | NO  |

**2. Citations and explanations**

Document 1: WO, 20-002560, A2 (Novo Nordisk A/S), 10 January, 2002 (10.01.02)

Document 2: EP, 206415, A2 (Janssen Pharmaceutica N.V.), 30 December, 1986 (30.12.86)

Document 3: Heterocyclic Hydrazines and Hydrazones. IV. Synthesis of Hydrazine Derivatives in the [4,5-d]Imidazo-4-Pyridazinone Series, (M. Beljean-Leymarie), Canadian Journal of Chemistry, 1983, Vol. 61, No. 11, pages 2563-2566

Document 4: Synthesis of 8-Amino-3-Deazaguanine via Imidazole Precursors. Antitumor Activity and Inhibition of Purine Nucleoside Phosphorylase, (D. A. Berry), Journal of Medical Chemistry, 1986, Vol. 29, No. 10, pages 2034-2037

Claims 1-30, 32 and 33

The subject matters of claims 1-30, 32 and 33 appear to be novel and to involve an inventive step in view of documents 1-4 cited in the ISR.

Documents 1-4 do not describe or suggest the invention of the present application.

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## VI. Certain documents cited

## 1. Certain published documents (Rule 70.10)

| <u>Application No.<br/>Patent No.</u>                                   | <u>Publication date<br/>(day/month/year)</u> | <u>Filing date<br/>(day/month/year)</u> | <u>Priority date (valid claim)<br/>(day/month/year)</u> |
|---|--|---|---|
| WO 02/068420 A1<br>(BOEHRINGER<br>INGELHEIM<br>PHARMA K. -G.)<br>[E, A] | 06.09.2002                                   | 21.02.2002                              | 24.02.2001  |
| WO 03/004496 A1<br>(NOVO NORDISK<br>A/S)<br>[E, A]                      | 16.01.2003                                   | 27.06.2002                              | 03.07.2001  |

## 2. Non-written disclosures (Rule 70.9)

| <u>Kind of non-written disclosure</u> | <u>Date of non-written disclosure<br/>(day/month/year)</u> | <u>Date of written disclosure<br/>referring to non-written disclosure<br/>(day/month/year)</u> |
|---------------------------------------|--|--|
|---------------------------------------|--|--|